

Claims: What is claimed is:

1. A fixed wireless network extender comprises:

(a) a processor unit where CPU running system software and networking software.

5 (b) two system buses to which wireless and wired networking unit can be attached to

(c) a control unit monitors and controls the performance of the radio units

(d) plurality of wireless networking radio units

(e) plurality wired networking units to connect to wired network

10 2. The processor unit of claim 1 is the system platform as well as networking
functionality platform, so that network packets are exchanged among [[the wireless
and wired interfaces]] said wireless networking radio units and wired networking
units.

15 3. The number and type of the said wireless networking radio units of Claim 1 can be
selected and installed to fit different networking application, so that to configure the
fixed wireless network extender.

20 4. The wireless networking radio units of Claim 3 are the same types of
radio working at different channel.

5. The wireless networking radio units of Claim 3 are totally different types
of wireless networking radio.

25 6. The wireless networking radio units of Claim3 are same type of radio
isolated by fixed directional antenna, thereby no interference among them.

7. The radio control units of claim1 are an optional units when radio units need
outside hardware controls, said radio control unit may be omitted when the

networking device of claim 1 is configured with all the radio units that do not apply additional performance control.

5 8. The wireless networking radio units of claim 1 may be built on the same PCB, and configure the device by turn on and off each unit.

9. The wired networking units of claim 1 may be built on the same PCB, and configure the device by turn on and off each units.